

ABSTRACT OF THE DISCLOSURE

A demodulator and a demodulating method for a mobile phone are provided. In particular, the present invention can simultaneously perform operation of improving the demodulation error rate caused by such as noise and external feedback loop operation being correction after detected, and can reduce the current consumption by restraining the increase of the process time at the simultaneous operation with an external correction circuit after detected, and can improve the CN ratio (ratio between carrier power and noise power). The present invention provides a received error rate improving means which improves the received error rate by weighting for differences at symbols before and after a symbol to be demodulated at the present time and applying feedback for symbols, a weighting means for applying weighting for correction values after detected of external another loop, a deciding the order of priority means for deciding the order of priority for plural correction values, and an adapting itself to various radio wave environment and the kinds of noise by using the weighting means and the deciding the order of priority means.